

SEQUENCE LISTING

<110> Drmanac, R.
Drmanac, S.
Kita, D.
Cooke, C.
Xu, C.

<120> ENHANCED SEQUENCING BY HYBRIDIZATION USING POOLS OF PROBES

<130> 30311/35918

<140> US 09/479,608
<141> 2000-01-06

<150> US 60/115,284
<151> 1999-01-06

<160> 71

<170> PatentIn version 3.0

<210> 1
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 1
aaaaaaaaaa 10

<210> 2
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 2
acacacacac 10

<210> 3
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 3
atctgtgtct gaagtagtcc 20

<210> 4
<211> 20
<212> DNA
<213> Artificial Sequence

```

<220>
<223> Hypothetical sequence

<400> 4
atctctggct gaagtagtcc 20

<210> 5
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<220>
<221> misc_feature
<222>
<223> b = C or G or T

<400> 5
bbbbbbattt cbbbbbgtac tbbbggttg bbbacacgbb bbb 43

<210> 6
<211> 43
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<220>
<221> misc_feature
<222>
<223> b = C or G or T

<400> 6
bbbbbbattt gbbbacactb bbbgtttcbb bbbgcacgbb bbb 43

<210> 7
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 7
ggtctcccca 10

<210> 8
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 8
gtctcccca 10

```

--2--

```

<210> 9
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 9
tctccccaag 10

<210> 10
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 10
ctccccaagg 10

<210> 11
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 11
tccccaaggc 10

<210> 12
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 12
ccccaaggcg 10

<210> 13
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 13
cccaaggcgc 10

<210> 14
<211> 10
<212> DNA
<213> Artificial Sequence

```

--3--

```

<220>
<223> Hypothetical sequence

<400> 14
ccaaggcgca 10

<210> 15
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 15
caaggcgcac 10

<210> 16
<211> 30
<212> DNA
<213> Artificial sequence

<220>
<223> Hypothetical sequence

<400> 16
tgcttgccac aggtctcccc aaggcgcaact 30

<210> 17
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 17
aggtctcccc 10

<210> 18
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 18
ggtctcccca 10

<210> 19
<211> 10
<212> DNA
<213> Artificial Sequence

```

```

<220>
<223>   Hypothetical sequence

<400>  19
gtctccccaa                                10

<210>  20
<211>  10
<212>  DNA
<213>  Artificial Sequence

<220>
<223>   Hypothetical sequence

<400>  20
tctccccaag                                10

<210>  21
<211>  10
<212>  DNA
<213>  Artificial Sequence

<220>
<223>   Hypothetical sequence

<400>  21
ctccccaagg                                10

<210>  22
<211>  10
<212>  DNA
<213>  Artificial Sequence

<220>
<223>   Hypothetical sequence

<400>  22
tccccaaggc                                10

<210>  23
<211>  10
<212>  DNA
<213>  Artificial Sequence

<220>
<223>   Hypothetical sequence

<400>  23
ccccaaggcg                                10

<210>  24
<211>  10
<212>  DNA
<213>  Artificial Sequence

<220>
<223>   Hypothetical sequence

<400>  24

```

--5--

```

ccaaggcgc                                     10
<210> 25
<211> 10
<212> DNA
<213> Artificial Sequences

<220>
<223> Hypothetical sequence

<400> 25
ccaaggcgcga                                 10
<210> 26
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 26
caaggcgcac                                 10
<210> 27
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 27
caggtctccc                                 10
<210> 28
<211> 10
<212> DNA
<213> Artificial Sequences

<220>
<223> Hypothetical sequence

<400> 28
gcttgccaca                                 10
<210> 29
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 29
cttgccacag                                 10
<210> 30
<211> 10

```

<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 30
ttgccacagg 10

<210> 31
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 31
tgccacagg 10

<210> 32
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 32
gccacaggtc 10

<210> 33
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 33
ccacagggtg 10

<210> 34
<211> 10
<212> DNA
<213> Artificial Sequence

<220>
<223> Hypothetical sequence

<400> 34
cacagggtctc 10

<210> 35
<211> 10
<212> DNA
<213> Artificial Sequence

<220>

--7--

```

<223> Hypothetical sequence

<400> 35
acaggtctcc 10

<210> 36
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 36
agcttgccac 10

<210> 37
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 37
tgcttgccac 10

<210> 38
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 38
cgcttgccac 10

<210> 39
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 39
ggcttgccac 10

<210> 40
<211> 10
<212> DNA
<213> artificial sequence

<220>
<223> Hypothetical sequence

<400> 40
ctcgatccgg 10

```


<210> 41
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 41
 gtaggggtag acatcgcgta aaagggggt acccaggacc ccccttggt caataagtag 60
 cgctgggggt ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120
 cttatttaac gaaggctcgg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt cttcccgaag gctatcgggt agaatatcag attcgtttaa 300

<210> 42
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 42
 ggtaggggta gacatcgcgt aaaagggggt taccaggac ccccttggt tcaataagta 60
 gcgctgggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
 gcttatttaa cgaaggctgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggctccc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaag agctatcggg tagaatatca gattcgttta 300

<210> 43
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 43
 ggtaggggta gacatcgcgt aaaagggggt taccaggac ccccttggt tcaataagta 60
 gcgctgggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
 gcttatttaa cgaaggctgc gataaggtgc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaag agctatcggg tagaatatca gattcgtttg 300

<210> 44
 <211> 300

--9--

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 44

ggtagggtta gacatcgcgtaaaggggcgt taccaggac ccccttggc tcaataagta 60

gcgtgggtt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacgg 120

gcttatttaa cgaaggtcgc gataagggtgc cgaataggct gcagagcggc agcctgtcca 180

gtgaatgctg tgaggctcc agctgactca tgagagaagc ccagtattca aactacgatt 240

ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttt 300

<210> 45

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 45

gtaggggtag acatcgcgtaaaaggggcgt acccaggacc ccccttggct caataagtag 60

cgctgggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggtcgcg ataagggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 46

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 46

gtaggggtag acatcgcgtaaaaggggcgt acccaggacc ccccttggct caataagtag 60

cgctgggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggtcgcg ataagggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgttttg 300

<210> 47

<211> 300

<212> DNA

<213> Artificial sequence

-- 10 --

<220>

<223> Hypothetical sequence

<400> 47

gtagggtag acatcgcgta aaagggggt acccaggacc ccccttggct caataagtag 60

cgctggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcgcca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaag gctatcgggt agaatatcag attcgtttaa 300

<210> 48

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 48

ggtaggggtg gacatcgcgta aaaagggggtg taccaggacc ccccttggc tcaataagta 60

gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagettcc attcgacagg 120

gcttatttaa cgaaggtcgc gataaggtgc cgaataggct gcagagcgcc agcctgtcca 180

gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240

ccactcgaca atttaggatg tcttcccgaag agctatcggg tagaatatca gattcgttta 300

<210> 49

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 49

gtagggtag acatcgcgta aaagggggt acccaggacc ccccttggct caataagtag 60

cgctggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcgcca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaag gctatcgggt agaatatcag attcgtttaa 300

<210> 50

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

-- 11 --

<400> 50
 ggtaggggta gacatcgcgtaaagggggcg taccaggac ccccttggc tcaataagta 60
 gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttc attcgacgg 120
 gcttatttaa cgaagggtcg gataagggtc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttt 300

<210> 51
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 51
 gtaggggtag acatcgcgta aaagggggtg acccaggacc ccccttggct caataagtag 60
 cgctggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120
 cttatttaac gaaggctcgg ataagggtgc gaataggctg cagagcgcca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt ctcccgaaa gctatcgggt agaatatcag attcgttttg 300

<210> 52
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 52
 gggtaggggt agacatcgcg taaaaggggc gtaccaggga ccccttggc tcaataagta 60
 agcgctgggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgacg 120
 ggcttattta acgaagggtc cyataaggty ccgaataggc tgcagagcgg cagcctylcc 180
 agtgaatgct gtgaggcctc cagctgactc atgagagaag ccagttatc aaactacgat 240
 tccactcgac aatttaggat gtcttccga aagctatcgg gtagaatatc agattcgttt 300

<210> 53
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 53
 ggtaggggta gacatcgcgtaaagggggcg taccaggac ccccttggc tcaataagta 60

-- 12 --

gcgctgggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacgg 120
 gcttatttaa cgaaggctcg gataagggtc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttg 300

<210> 54
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 54
 gggtaggggt agacatcgcg taaaaggggc gtacccaggga cccccccttg ctaataaagt 60
 agcgctgggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgacgg 120
 ggcttattta acgaaggctg cgataagggt cgaataggc tgcagagcgg cagcctgtcc 180
 agtgaatgct gtgaggctcc cagctgactc atgagagaag ccagttatc aaactacgat 240
 tccactcgac aatttaggat gtcttcccgaa agctatcgg gtagaatatc agattgtagt 300

<210> 55
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 55
 gtaggggtag acatcgcgta aaagggggtg acccaggacc ccccttggt caataagtag 60
 cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgacggg 120
 cttatttaac gaaggctcgg ataagggtgc gaataggctg cagagcggca gctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 caactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 56
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 56
 gtaggggtag acatcgcgta aaagggggtg acccaggacc ccccttggt caataagtag 60
 cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttcgacggg 120

-- 13 --

cttattttaac gaaggctcgcg ataagggtgcc gaataggctg cagagcggca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcccattg 300

<210> 57
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 57
 ggtaggggta gacatcgctg aaaaggggag taccaggac ccccttggc tcaataagta 60
 gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacagg 120
 gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcccattg 300

<210> 58
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 58
 gggtaggggt agacatcgcg taaaaggggc gtaccaggga ccccttggc ctcaataagt 60
 agcgtggggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgacag 120
 ggcttattta acgaaggctg cgataagggt ccgaataggc tgcagagcgg cagcctgtcc 180
 agtgaatgct gtgaggcttc cagctgactc atgagagaag ccagtattc aaactacgat 240
 tccactcgac aatttaggat gtcttccgaa aagctatcgg gtagaatc agattcccatt 300

<210> 59
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 59
 ggtaggggta gacatcgctg aaaaggggag taccaggac ccccttggc tcaataagta 60
 gcgctggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgacagg 120
 gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180

-- 14 --

gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240

ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcggtta 300

<210> 60

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 60

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggtt caataagtag 60

cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaag gctatcgggt agaatatcag attcggttga 300

<210> 61

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 61

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggtt caataagtag 60

cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaag gctatcgggt agaatatcag attcggttaa 300

<210> 62

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 62

gtaggggtag acatcgcgta aaaggggctg acccaggacc ccccttggtt caataagtag 60

cgctgggggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcacggg 120

cttatttaac gaaggtcgcg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

-- 15 --

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttaa 300

<210> 63

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 63

gtaggggtag acatcgcgta aaagggggtg acccaggacc ccccttggt caataagtag 60

cgctgggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcgacggg 120

cttatttaac gaaggtcggg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcccatgt 300

<210> 64

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 64

gtaggggtg gacatcggtg aaaagggggg taccaggacc ccccttggtg tcaataagta 60

gcgctgggtg gctactacgg gtctcgacac geattcaact aaaagcttcc attcgcacgg 120

gcttatttaa cgaaggtcgg gataaggtgc cgaataggct gcagagcggc agcctgtcca 180

gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240

ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgtttt 300

<210> 65

<211> 300

<212> DNA

<213> Artificial sequence

<220>

<223> Hypothetical sequence

<400> 65

gtaggggtg acatcgcgta aaagggggtg acccaggacc ccccttggtg caataagtag 60

cgctgggtg ctactacggg tctcgacacg cattcaacta aaagcttcca ttgcgacggg 120

cttatttaac gaaggtcggg ataaggtgcc gaataggctg cagagcggca gcctgtccag 180

tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240

cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgttttg 300

-- 16 --

<210> 66
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 66
 ggtaggggta gacatcgcgtaaagggggcg taccaggac ccccttggc tcaataagta 60
 gcgctgggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
 gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttccgaa agctatcggg tagaatatca gattcccatg 300

<210> 67
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 67
 gggtaggggt agacatcgcg taaaaggggc gtaccaggac ccccttggc ctcaataagt 60
 agcgtgggggt tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgcacg 120
 ggcttattta acgaaggctc cgataagggt ccgaataggc tgcagagcgg cagcctgtcc 180
 agtgaatgct gtgaggcctc cagctgactc atgagagaag ccagtatttc aaactacgat 240
 tccactcgac aatttaggat gtcttccgaa aagctatcgg tagaataatc agattcgttt 300

<210> 68
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 68
 ggtaggggta gacatcgcgtaaagggggcg taccaggac ccccttggc tcaataagta 60
 gcgctgggggt gctactacgg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
 gcttatttaa cgaaggctgc gataagggtc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcctcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttccgaa agctatcggg tagaatatca gattcgtttg 300

<210> 69
 <211> 300

-- 17 --

<212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 69
 gggtaggggt agacatcgcg taaaagggcg gtacccaggga ccccccttgg ctcaataagt 60
 agcgcgtggg tgctactacg ggtctcgaca cgcattcaac taaaagcttc cattcgcacg 120
 ggcttattta acgaaggctg cgataagggt ccgaataggc tgcagagcgg cagcctgtcc 180
 agtgaatgct gtgaggcctc cagctgactc atgagagaag ccagtatctc aaactacgat 240
 tccactcgac aatttaggat gtcttccgaa aagctatcgg gtagaatatc agattcccat 300

<210> 70
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 70
 ggtaggggta gacatcgcg aaaaggggcg taccaggac cccccctggc tcaataagta 60
 gcgctgggggt gctactacg gtctcgacac gcattcaact aaaagcttcc attcgcacgg 120
 gettatttaa cgaaggctcg gataagggtc cgaataggct gcagagcggc agcctgtcca 180
 gtgaatgctg tgaggcotcc agctgactca tgagagaagc ccagtattca aactacgatt 240
 ccactcgaca atttaggatg tcttcccgaa agctatcggg tagaatatca gattcgttta 300

<210> 71
 <211> 300
 <212> DNA
 <213> Artificial sequence

<220>
 <223> Hypothetical sequence

<400> 71
 gtaggggtag acatcgcgta aaagggggtg acccaggacc ccccttggt caataagtag 60
 cgctgggggtg ctactacggg tctcgacacg cattcaact aaagcttcca ttcgacggg 120
 cttatttaac gaaggctcgg ataagggtgc gaataggctg cagagcgcca gcctgtccag 180
 tgaatgctgt gaggcctcca gctgactcat gagagaagcc cagtattcaa actacgattc 240
 cactcgacaa tttaggatgt cttcccgaaa gctatcgggt agaatatcag attcgtttga 300